



Resistance Curve Regulator Lever; "BungeeFlex"

Benjamin Martin Haneckow

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Abstract

An exercise device for building muscle, burning fat. An exercise device; allowing a user to choose a preferred resistance curve appropriate for specific exercise. A device allowing user to use resistance curve in any practical way.

Background

This invention relates to the field of exercise devices more specifically to devices for using springs or elastomers for resistance and devices providing resistance curves.

Prior Art

There are resistance curve devices such as 6575881 and there are devices to use springs for resistance such as 6328679 but they are cumbersome and difficult to transport. Patent 6575881 uses weight members for resistance so it is heavy. Patent 6328679 is also limited to being mounted on a wall.

Summary

Present invention allows for the pound per inch requirements associated with stretching a spring or elastomer to be converted to a different pound per inch to stretch spring or elastomer

for the purpose that the different pound per inch can be more beneficial than the original pound per inch to stretch elastomer spring.

Objects and Advantages

Present invention allows for a very lightweight compact device to make resistance for exercise. It also provides different resistance curves which can be used on different muscles. For example when doing the common exercise of a pulldown a person is strongest at the beginning when arms are extended up at the top and as you pull down it gets harder and harder. In this example a person could set the resistance curve to start with heavy pound per inch and drop to lighter pound per inch as person move through the range of motion. Where it is harder to pull. Another example is when someone does a bench press. In this exercise a person is still strongest when arms are extended, however the range of motion for this exercise begins after a person has lowered the bar down to their chest; where they are not as strong as when arms extended. For this exercise a person could set the resistance curve to be lighter pound per inch when bar is close to chest and pound per inch get harder as bar gets pushed up. Another example is if a person wants to have the same; or close to same; pound per inch through a motion to exercise a muscle they can set that resistance curve with present invention.

Description of Drawings

Fig 1

100 Resistance Regulator Lever

10 Frame

20 Elastomer Spring

22 Places for attachment Elastomer Spring

30 Lever

32 Attachment places for lever

40 Pulley Sprocket

42 Cable Chain

44 Attachment places for pulley sprocket

Description of Invention

Present Invention includes a Frame 10 which can be made out of, and not limited to being made out of, wood, metal, fiberglass.

Present Invention includes a Elastomer Spring 20. The Elastomer Spring 20 can be made out of, and not be limited to being made out of, metal, rubber, or fiberglass. The Elastomer Spring 20 should have the characteristic of being able to stretch and return back to position. The stretching should require some pound per inch to stretch. Elastomer Spring 20 could be a device which gets squeezed. The squeeze should require a pound per inch to squeeze. The device which gets squeezed should have the characteristic of being able to return back to position.

The pound per inch to stretch Elastomer Spring 20 will be changed to a different pound per inch by the Resistance Curve Regulator Lever 100. The distance over which the pound per inch to stretch Elastomer Spring 20 can be different or the same as a distance over which the different pound per inch to stretch.

Present invention includes a Lever 30. The Lever 30 can be made out of, and not limited to being made out of, metal, wood, plastic, and fiberglass. The Lever 30 can have components attached to the Lever 30 at any distance from fulcrum and can have the components attached to the Lever 30 on different sides of fulcrum.

Present invention includes a Pulley Sprocket 40. The Pulley Sprocket 40 can work with a Cable Chain 42. The Pulley Sprocket 40 can be made out of and not limited to being made out of, metal, plastic. The Pulley Sprocket 40 has the purpose of pulling the Lever 30 from the Pulley Sprocket Position 42

The Pulley Sprocket Position 42 in relation to the lever 30 and the Elastomer Spring position 22 to the Lever 30 are both variables in changing the Elastomer Spring 20 pound per inch to stretch to the different pound per inch.

The Frame 10 can have different places to attach the lever 32. Different places to attach Pulley Sprocket 44. Different places to attach Elastomer Spring 22. These different places to attach Lever 32, Elastomer Spring 22, and Pulley Sprocket 44 can effect conversion of original pound per inch to stretch Elastomer Spring 22 to different pound per inch to stretch Elastomer Spring 22 at Pulley Sprocket 40.